

ABSTRACT OF THE DISCLOSURE

A method and apparatus is provided for depositing and planarizing a material layer on a substrate. In one embodiment, an apparatus is provided which includes a partial enclosure, a permeable disc, a diffuser plate and optionally an anode. A substrate carrier is positionable above the partial enclosure and is adapted to move a substrate into and out of contact or close proximity with the permeable disc. The partial enclosure and the substrate carrier are rotatable to provide relative motion between a substrate and the permeable disc. In another aspect, a method is provided in which a substrate is positioned in a partial enclosure having an electrolyte therein at a first distance from a permeable disc. A current is optionally applied to the surface of the substrate and a first thickness is deposited on the substrate. Next, the substrate is positioned closer to the permeable disc and a second thickness is deposited on the substrate. During the deposition, the partial enclosure and the substrate are rotated relative one another.

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